PATENT ABSTRACT DATABASES

[your invention]

9/5/1 (Item 1 from file: 350)
DIALOG(R)File 350: Derwent WPIX
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0014515736 *Drawing available*
WPI Acc no: 2004-697671/200468
Related WPI Acc No: 2000-672590; 2003-331360; 2003-429690; 2003-492021; 2003-556633; 2003-598999; 2003-618801; 2003-636908; 2003-709140; 2003-744465; 2003-778053; 2003-801037; 2003-801549; 2003-801728; 2003-854288; 2003-875004; 2004-031547; 2004-281382; 2004-281385; 2004-303692; 2004-303895; 2004-303896; 2004-339901; 2005-194195; 2005-423462; 2005-629019; 2006-401350; 2006-536416; 2006-576334; 2006-600989; 2007-148599; 2007-157336; 2007-523208; 2007-673842; 2007-843365; 2008-A96344; 2008-F30393; 2008-F81867; 2008-M99741; 2009-F10793; 2009-G21130

Digital video and audio content providing method, involves producing Internet protocol datagram with header and segmented body having packets with identifiers, and transmitting datagram from head-end to digital device
Patent Assignee: CANDELORE B L (CAND-I); SONY ELECTRONICS INC (SONY)
Inventor: CANDELORE B; CANDELORE B L

Patent Family (5 patents, 107 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 20040181666	A1	20040916	US 2001296673	P	20010606	200468	B
			US 2001304131	P	20010710		
			US 2001304241	P	20010710		
			US 2001343710	P	20011026		
			US 200237499	A	20020102		
			US 2003387163	A	20030311		
			US 2004815371	A	20040331		
WO 2004082147	A2	20040923	WO 2004US6767	A	20040305	200468	E
EP 1618666	A2	20060125	EP 2004717990	A	20040305	200608	E
			WO 2004US6767	A	20040305		
KR 2005118176	A	20051215	WO 2004US6767	A	20040305	200652	E
			KR 2005716825	A	20050909		
JP 2007525052	W	20070830	WO 2004US6767	A	20040305	200759	E
			JP 2006509171	A	20040305		

Priority Applications (no., kind, date): US 2001296673 P 20010606; US 2001304131 P 20010710; US 2001304241 P 20010710; US 2001343710 P 20011026; US 200237499 A 20020102; US 2003387163 A 20030311; US 2004815371 A 20040331

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 20040181666	A1	EN	41	19	Related to Provisional	US 2001296673
					Related to Provisional	US 2001304131

					Related to Provisional	US 2001304241
					Related to Provisional	US 2001343710
					C-I-P of application	US 200237499
					C-I-P of application	US 2003387163
WO 2004082147	A2	EN				
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
EP 1618666	A2	EN			PCT Application	WO 2004US6767
					Based on OPI patent	WO 2004082147
Regional Designated States,Original	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR					
KR 2005118176	A	KO			PCT Application	WO 2004US6767
					Based on OPI patent	WO 2004082147
JP 2007525052	W	JA	32		PCT Application	WO 2004US6767
					Based on OPI patent	WO 2004082147

Alerting Abstract US A1
NOVELTY - The method involves determining whether a destination field of an Internet protocol (IP) header is loaded with a multicast IP address. An IP datagram having the IP header and a segmented body is produced. The produced IP datagram is transmitted from the head-end to a digital device e.g. personal computer and audio system. The segmented body includes a number of packets with identifiers.
DESCRIPTION - One packet has an identifier that indicates a type of data stored in a payload of the packet, and the other packet with another identifier to indicate that the packet has content duplicative of content of former packet and cause the digital device to disregard the content. The latter packet is **encrypted** by a different key. An INDEPENDENT CLAIM is also included for a software packet filter program to perform a method of receiving content from a head-end by a digital device.
USE - Used in terrestrial broadcast based content delivery system, Internet based content delivery, and satellite based content delivery system, for providing digital video and audio content from a head-end to a digital device e.g. PDA, personal computer, personal music player, audio system and digital recorder, over a network.
ADVANTAGE - The method transmits the digital audio and video content to the digital device along with the IP datagram, thus effectively securing the contents, and reducing the bandwidth requirements of the digital device.
DESCRIPTION OF DRAWINGS - The drawing shows a flow chart of a decryption process.

0013815306 *Drawing available*
WPI Acc no: 2003-492021/200346
Related WPI Acc No: 2000-672590; 2003-311631; 2003-331360; 2003-429690; 2003-556633; 2003-598999; 2003-618801; 2003-636908; 2003-709140; 2003-744465; 2003-778053; 2003-801037; 2003-801549; 2003-801728; 2003-854288; 2003-875004; 2004-031547; 2004-281382; 2004-281385; 2004-303692; 2004-303895; 2004-303896; 2004-339901; 2004-697671; 2005-194195; 2005-423462; 2005-629019; 2006-401350; 2006-536416; 2006-576334; 2006-600989; 2007-148599; 2007-157336; 2007-523208; 2007-673842; 2007-843365; 2008-A96344; 2008-F30393; 2008-F81867; 2008-M99741; 2009-F10793; 2009-G21130

Digital television signal encryption method for airline in-flight movie system, involves replacing unencrypted packets of predetermined packet type, with encrypted packets in TV signal to produce partially encrypted signal

Patent Assignee: SONY ELECTRONICS INC (SONY); CANDELORE B L (CAND-I); UNGER R A (UNGE-I); SONY CORP (SONY)
Inventor: CANDELORE B L; UNGER R A

Patent Family (9 patents, 101 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 20030026423	A1	20030206	US 2001296673	P	20010606	200346	B
			US 2001304131	P	20010710		
			US 2001304241	P	20010710		
			US 2001343710	P	20011026		
			US 200238217	A	20020102		
CA 2405901	A1	20030426	CA 2405901	A	20021001	200346	E
WO 2003061289	A1	20030724	WO 2002US40050	A	20021213	200349	E
AU 2002360604	A1	20030730	AU 2002360604	A	20021213	200421	E
EP 1464174	A1	20041006	EP 2002795874	A	20021213	200465	E
			WO 2002US40050	A	20021213		
MX 2004006249	A1	20041101	WO 2002US40050	A	20021213	200558	E
			MX 20046249	A	20040624		
US 7336787	B2	20080226	US 200238217	A	20020102	200816	E
KR 2008110940	A	20081219	WO 2002US40050	A	20021213	200919	E
			KR 2004710457	A	20040701		
			KR 2008730265	A	20081211		
MX 257868	B	20080611	WO 2002US40050	A	20021213	200941	E
			MX 20046249	A	20040624		

Priority Applications (no., kind, date): US 2001296673 P 20010606; US 2001304131 P 20010710; US 2001304241 P 20010710; US 2001343710 P 20011026; US 200238217 A 20020102; US 200238217 A 20020102; CA 2405901 A 20021001

Patent Details					
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**

US 20030026423	A1	EN	39	18	Related to Provisional	US 2001296673
					Related to Provisional	US 2001304131
					Related to Provisional	US 2001304241
					Related to Provisional	US 2001343710
CA 2405901	A1	EN				
WO 2003061289	A1	EN				
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW					
AU 2002360604	A1	EN			Based on OPI patent	WO 2003061289
EP 1464174	A1	EN			PCT Application	WO 2002US40050
					Based on OPI patent	WO 2003061289
Regional Designated States,Original	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					
MX 2004006249	A1	ES			PCT Application	WO 2002US40050
					Based on OPI patent	WO 2003061289
KR 2008110940	A	KO			PCT Application	WO 2002US40050
					Division of application	KR 2004710457
					Based on OPI patent	WO 2003061289
MX 257868	B	ES			PCT Application	WO 2002US40050
					Based on OPI patent	WO 2003061289

Alerting Abstract US A1

NOVELTY - The unencrypted **packets** of data in digital television (TV) signal, are examined to identify predetermined **packet** type. The **packets** that are identified as predetermined **packet** type, are encrypted. The unencrypted **packets** of predetermined **packet** type is replaced with the encrypted **packets** in the digital TV signal, to produce a partially encrypted digital TV signal.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. electronic storage medium storing digital television signal encrypting program;
2. electronic transmission medium;
3. encrypted television program;
4. television set-top box;
5. partially encrypted television program decoding method;
6. information stream encryption method using **packets**;
7. packetized digital content manipulation method; and
8. multiple conditional access providers allowing method.

USE - For encrypting digital television signal in entertainment system e.g. airline in-flight movie system.

ADVANTAGE - Allows the digital television signal to be efficiently encrypted, by replacing the

unencrypted **packets** with the encrypted **packets**.
DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the decoder chip.

0013703918 *Drawing available*
WPI Acc no: 2003-801037/200375
Related WPI Acc No: 2000-672590; 2003-311631; 2003-331360; 2003-429690; 2003-492021; 2003-556633; 2003-598999; 2003-618801; 2003-636908; 2003-709140; 2003-744465; 2003-778053; 2003-801549; 2003-801728; 2003-854288; 2003-875004; 2004-031547; 2004-281382; 2004-281385; 2004-303692; 2004-303895; 2004-303896; 2004-339901; 2004-697671; 2005-194195; 2005-423462; 2005-629019; 2006-401350; 2006-536416; 2006-576334; 2006-600989; 2007-148599; 2007-157336; 2007-523208; 2007-673842; 2007-843365; 2008-A96344; 2008-F30393; 2008-F81867; 2008-M99741; 2009-F10793; 2009-G21130
Partially encrypted television program decoding method involves decrypting encrypted packets having secondary packet identifier and decoding decrypted packets along with unencrypted packets having primary packet identifier
Patent Assignee: SONY ELECTRONICS INC (SONY); CANDELORE B L (CAND-I); UNGER R A (UNGE-I); SONY CORP (SONY)
Inventor: CANDELORE B L; PEDLOW L M; UNGER R A

Patent Family (3 patents, 2 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 20020196939	A1	20021226	US 2001296673	P	20010606	200375	B
			US 2001304131	P	20010710		
			US 2001304241	P	20010710		
			US 200237498	A	20020102		
CA 2406329	A1	20030426	CA 2406329	A	20021001	200375	E
US 7127619	B2	20061024	US 2001296673	P	20010606	200670	E
			US 2001304131	P	20010710		
			US 2001304241	P	20010710		
			US 2001343710	P	20011026		
			US 200237498	A	20020102		

Priority Applications (no., kind, date): US 2001296673 P 20010606; US 2001304131 P 20010710; US 2001304241 P 20010710; US 2001343710 P 20011026; US 200237498 A 20020102

Patent Details						
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**	
US 20020196939	A1	EN	37	18	Related to Provisional	US 2001296673
					Related to Provisional	US 2001304131
					Related to Provisional	US 2001304241
CA 2406329	A1	EN				
US 7127619	B2	EN			Related to Provisional	US 2001296673
					Related to Provisional	US 2001304131
					Related to Provisional	US 2001304241
					Related to Provisional	US 2001343710

Alerting Abstract US A1

NOVELTY - A partially encrypted television program is identified by unencrypted and encrypted **packets** associated with a primary **packet** identifier and a secondary **packet** identifier, respectively. The **packets** having secondary **packet** identifier are decrypted. The decrypted **packets** are decoded along with **packets** having primary **packet** identifier.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. partially encrypted television signals decoding method;
2. partially encrypted television program decoding method;
3. television;
4. content player;
5. television set top box;
6. decoding circuit; and
7. **packets** processing method.

USE - For decoding partially encrypted content such as television signals.

ADVANTAGE - Since only a portion of the program is encrypted, less bandwidth is consumed, thus large number of programs are carried over the same bandwidth, while permitting coexistence of multiple conditional access system in a single cable television system.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the decoder chip.

1014,1032,1052 buffers

1018 MPEG audio decoder

1036,1056 MPEG video decoder

17/5/4 (Item 4 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0013465100 *Drawing available*
WPI Acc no: 2003-556633/200352
Related WPI Acc No: 2000-672590; 2003-331360; 2003-429690; 2003-492021; 2003-598999; 2003-618801; 2003-636908; 2003-709140; 2003-744465; 2003-778053; 2003-801037; 2003-801549; 2003-801728; 2003-854288; 2003-875004; 2004-031547; 2004-281382; 2004-281385; 2004-303692; 2004-303895; 2004-303896; 2004-339901; 2004-697671; 2005-194195; 2005-423462; 2005-629019; 2006-401350; 2006-536416; 2006-576334; 2006-600989; 2007-148599; 2007-157336; 2007-523208; 2007-673842; 2007-843365; 2008-A96344; 2008-F30393; 2008-F81867; 2008-M99741; 2009-F10793; 2009-G21130

Digital television signal encryption method for use in e.g. digital cable system, involves encrypting audio packets that are identified by using packet identifier, according to different encryption methods

Patent Assignee: SONY ELECTRONICS INC (SONY); CANDELORE B L (CAND-I); SONY CORP (SONY)
Inventor: CANDELORE B L; EYER M K; MIRSKY G; PEDLOW L M; UNGER R A

Patent Family (4 patents, 3 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
US 20030081776	A1	20030501	US 2001296673	P	20010606	200352	B
			US 2001304131	P	20010710		
			US 2001304241	P	20010710		
			US 200237914	A	20020102		
CA 2405865	A1	20030426	CA 2405865	A	20021001	200352	E
CN 1633809	A	20050629	CN 2002828452	A	20021213	200574	E
US 7124303	B2	20061017	US 2001296673	P	20010606	200668	E
			US 2001304131	P	20010710		
			US 2001304241	P	20010710		
			US 2001343710	P	20011026		
			US 200237914	A	20020102		

Priority Applications (no., kind, date): US 2001296673 P 20010606; US 2001304131 P 20010710; US 2001304241 P 20010710; US 2001343710 P 20011026; US 200237914 A 20020102; CA 2405865 A 20021001

Patent Details					
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**
US 20030081776	A1	EN	38	18	Related to Provisional US 2001296673
					Related to Provisional US 2001304131
					Related to Provisional US 2001304241
CA 2405865	A1	EN			
US 7124303	B2	EN			Related to Provisional US 2001296673
					Related to Provisional US 2001304131
					Related to Provisional US 2001304241

| | | | | Related to Provisional | US 2001343710 |

Alerting Abstract US A1

NOVELTY - Audio **packets** of a digital television signal, that are to be encrypted are identified, using **packet** identifier. The identified audio **packets** are encrypted according to **different encryption methods**, to produce respective **encrypted** audio portions. Unencrypted video portion of the television signal, is combined with the encrypted audio portions.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. electronic storage medium storing program for encrypting digital television signal;
2. electronic transmission medium carrying encrypted television signal;
3. television set-top box;
4. cable system headend; and
5. television signal decoding method.

USE - In digital audio/video system, digital cable system, terrestrial broadcast based content delivery system, internet- based content delivery system and satellite-based content delivery system.

ADVANTAGE - Enhances the security of encryption and reduces bandwidth overhead.

DESCRIPTION OF DRAWINGS - The figure shows the flowchart of dual encryption method.

24/5/5 (Item 5 from file: 350)
DIALOG(R)File 350: Derwent WPIX

0013042068 *Drawing available*
WPI Acc no: 2003-121356/200311
XRPX Acc No: N2003-096615
Transmitting data frames e.g. for Internet applications using stream- cipher information embedded redundantly in next packet of encrypted frame
Patent Assignee: KONINK PHILIPS ELECTRONICS NV (PHIG); VAN PUL C L M (VPUL-I); VAN RIJNSOEVER B J (VRIJ-I)
Inventor: VAN PUL C; VAN PUL C L M; VAN RIJNSOEVER B; VAN RIJNSOEVER B J; VAN P C L

Patent Family (10 patents, 24 countries)							
Patent Number	**Kind**	**Date**	**Application Number**	**Kind**	**Date**	**Update**	**Type**
WO 2003005635	A2	20030116	WO 2002IB2393	A	20020620	200311	B
DE 60224803	T2	20090122	DE 60224803	A	20020620	200907	E
			EP 2002738488	A	20020620		
			WO 2002IB2393	A	20020620		
KR 2003045055	A	20030609	KR 2003703338	A	20030306	200370	E
EP 1407574	A2	20040414	EP 2002738488	A	20020620	200426	E
			WO 2002IB2393	A	20020620		
US 20040165722	A1	20040826	WO 2002IB2393	A	20020620	200457	E
			US 2003482145	A	20031222		
JP 2004534479	W	20041111	WO 2002IB2393	A	20020620	200474	E
			JP 2003511472	A	20020620		
CN 1524362	A	20040825	CN 2002813511	A	20020620	200477	E
EP 1407574	B1	20080123	EP 2002738488	A	20020620	200810	E
			WO 2002IB2393	A	20020620		
DE 60224803	E	20080313	DE 60224803	A	20020620	200821	E
			EP 2002738488	A	20020620		
			WO 2002IB2393	A	20020620		
JP 4083678	B2	20080430	WO 2002IB2393	A	20020620	200831	E
			JP 2003511472	A	20020620		

Priority Applications (no., kind, date): EP 2001202608 A 20010706

Patent Details				
Patent Number	**Kind**	**Lan**	**Pgs**	**Draw**	**Filing Notes**
WO 2003005635	A2	EN	10	4	
National Designated States,Original	CN JP KR US				
Regional Designated	AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR				

States,Original						
DE 60224803	T2	DE			Application	EP 2002738488
					PCT Application	WO 2002IB2393
					Based on OPI patent	EP 1407574
					Based on OPI patent	WO 2003005635
EP 1407574	A2	EN			PCT Application	WO 2002IB2393
					Based on OPI patent	WO 2003005635
Regional Designated States,Original	AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR					
US 20040165722	A1	EN			PCT Application	WO 2002IB2393
JP 2004534479	W	JA	23		PCT Application	WO 2002IB2393
					Based on OPI patent	WO 2003005635
EP 1407574	B1	EN			PCT Application	WO 2002IB2393
					Based on OPI patent	WO 2003005635
Regional Designated States,Original	AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR					
DE 60224803	E	DE			Application	EP 2002738488
					PCT Application	WO 2002IB2393
					Based on OPI patent	EP 1407574
					Based on OPI patent	WO 2003005635
JP 4083678	B2	JA	7		PCT Application	WO 2002IB2393
					Previously issued patent	JP 2004534479
					Based on OPI patent	WO 2003005635

Alerting Abstract WO A2
NOVELTY - Involves frame-based information being transmitted through a transmission medium, whilst **payload** information of a particular **frame** is assigned to several transmission **packets**. The **payload** information of the **frame** is encrypted using a frame encryption key. Each transmission packet has individual stream-cipher-based synchronization information that, in combination with the frame decryption key, enables the associated encrypted transmission packet to be decrypted.
DESCRIPTION - The stream-**cipher**-based synchronization **information** is transmitted by **redundantly** including it in a second transmission packet next to the first packet. The stream-cipher-based synchronization information operates as seed information for decrypting the second transmission packet.
INDEPENDENT CLAIMs are included for a device, a system, a medium, a computer program and a transmitted signal.
USE - To provide secure streamed content to user's over the internet, such that the content cannot be illegally accessed or copied.
ADVANTAGE - Enables more reliable reception of sequence of individual decryption synchronizing information packets for improved transmission of e.g. streaming video.
DESCRIPTION OF DRAWINGS - The drawing shows the frame structure employed by the method.

17/3K/5 (Item 3 from file: 349)
DIALOG(R)File 349: PCT FULLTEXT
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00571790

A METHOD FOR OPTIMIZING OF DATA TRANSMISSION
PROCEDE POUR OPTIMISER LA TRANSMISSION DE DONNEES

Patent Applicant/Patent Assignee:

- **NOKIA MOBILE PHONES LTD**
- **RUUTU Jussi**
- **MA Jian**

Inventor(s):

- **RUUTU Jussi**
- **MA Jian**

	Country	Number	Kind	Date
Patent	WO	200035163	A1	20000615
Application	WO	99FI1008		19991207
Priorities	FI	982651		19981208

Designated States: (Protection type is "Patent" unless otherwise stated - for applications prior to 2004)
AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR,
BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM,
EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, GH,
GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT,
BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN,
TD, TG

Language Publication Language: English

Filing Language:

Fulltext word count: 6493

Claims:

...method according to claim 9, characterized in that
said destination network element uses said modified **copy** of the **information** instead of the **encrypted** version of the infon-nation carried as the **payload** of the IP **datagram**. 1 1. A method according to claim 1, be' used in congestion control 'in a ...

NPL

[date?]

16/5/5 (Item 2 from file: 23)
DIALOG(R)File 23: CSA Technology Research Database

0012384940   IP Accession No: 200909-71-1242678; 200909-61-1267059; 20091236013; A09-99-1719022
Processing an MPEG elementary stream in a conditional access overlay environment

Pinder, Howard G; Hopper, Jeffrey C
, USA
Publisher Url: http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u =/netaht
ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=75 55123.PN.&OS=pn/7555123&
RS=PN/7555123

Document Type: Patent
Record Type: Abstract
Language: English
File Segment: Metadex; Mechanical & Transportation Engineering Abstracts; ANTE: Abstracts in New
Technologies and Engineering; Aerospace & High Technology

Abstract:
Processing an MPEG elementary stream contained in multiple PID streams in a conditional access overlay
environment. A multi-program transport stream contains numerous video and audio elementary streams.
Critical **packets** in the elementary streams are encrypted with **two different encryption schemes** creating
a stream having multiple PID values. The streams are then sent from the headend to individual set-top
boxes. One encryption scheme can be decoded by the incumbent set-top box and the second encryption
scheme can be decoded by the overlay set-top box. The overlay set-top box uses a dual filter system to
filter and decode the PIDs for each video and audio stream of the desired program.

Descriptors: Streams; Encryption; Sound filters; Video compression; Conditional access; Proportional
integral derivative; MPEG encoders; Transport
Subj Catg: 71, General and Nonclassified; 61, Design Principles; 99, General

16/5/6 (Item 3 from file: 23)
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0011692501   IP Accession No: 200904-71-0775096; 200904-61-0789502; 20090763210; A09-99-0765065
Conditional access overlay partial encryption using MPEG transport continuity counter

Wasilewski, Anthony J
, USA
Publisher Url: http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u =/netaht
ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=74 90236.PN.&OS=pn/7490236&
RS=PN/7490236

Document Type: Patent
Record Type: Abstract
Language: English
File Segment: Metadex; Mechanical & Transportation Engineering Abstracts; ANTE: Abstracts in New
Technologies and Engineering; Aerospace & High Technology

Abstract:
A conditional access overlay system utilizing partial encryption without requiring additional program
identifiers. The conditional access overlay system generates duplicate critical packets for separate
encryption that are sent using the same packet identifier. The rest of the content stream is sent in the clear.
However, these duplicated packets are sent without incrementing a continuity counter relative to one
another. The overlay packets with non-incremented continuity counter are sent as the second packet
immediately following the original critical packet. At the receivers, the incumbent set-top will use the first
of the two encrypted **packets** while the overlay set-top is programmed to use the **second** of the **two
encrypted packets**. Therefore, **methods** for verifying alignment of associated **packets** may be used to
distinguish between **multiple encryption methods** in conditional access overlay systems.

Descriptors: Conditional access; Encryption; Continuity; Reproduction; MPEG encoders; Streams;
Receivers; Transport; Rest; Video compression; Alignment
Subj Catg: 71, General and Nonclassified; 61, Design Principles; 99, General

16/5/9 (Item 6 from file: 23)
DIALOG(R)File 23: CSA Technology Research Database
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0009650346   IP Accession No: 200807-71-0864988; 200807-61-0965518; 20080831284; A08-99-
0935220
Video slice and active region based multiple partial encryption

Candelore, Brant L; Derovanessian, Henry; Pedlow Jr, Leo M
, USA
Publisher Url: http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u =/netaht
ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=73 76233.PN.&OS=pn/7376233&
RS=PN/7376233

Document Type: Patent
Record Type: Abstract
Language: English
File Segment: Metadex; Mechanical & Transportation Engineering Abstracts; ANTE: Abstracts in New
Technologies and Engineering; Aerospace & High Technology

Abstract:
A selective encryption encoder and method of dual selective encryption. The selective encryption encoder
has a packet identifier that identifies packets of at least one specified packet type, the at least one specified
packet type being any of a plurality of packet types including packets containing a video slice headers or
packets carrying data appearing in an active area of the image. A packet duplicator duplicates the identified
packets to produce first and second sets of the identified packets. The packets are sent to and from a
primary encryption encoder to encrypt the first set of identified packets under a first encryption method. A
secondary encrypter encrypts the second set of identified **packets** under a **second encryption method**.

Descriptors: Encryption; Coders; Encoders; Reproduction; Images; Headers
Subj Catg: 71, General and Nonclassified; 61, Design Principles; 99, General

16/5/10 (Item 7 from file: 23)
DIALOG(R)File 23: CSA Technology Research Database

0009076943   IP Accession No: 200805-71-628148; 200805-61-676809; 2008608898; A08-99-658030
Dynamic composition of pre-encrypted video on demand content

Pedlow Jr, Leo M; Agnihotri, Davender
, USA
Publisher Url: http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u =/netaht
ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=73 46163.PN.&OS=pn/7346163&
RS=PN/7346163

Document Type: Patent
Record Type: Abstract
Language: English
File Segment: Metadex; Mechanical & Transportation Engineering Abstracts; ANTE: Abstracts in New
Technologies and Engineering; Aerospace & High Technology

Abstract:
According to certain embodiments consistent with the present invention, a method of processing digital
video content, wherein the digital video content comprises intra-coded frames and inter-coded frames,
involves selecting a plurality of the intra-coded frames for encryption to produce selected frames;
encrypting the selected frames under a first encryption algorithm to produce first encrypted frames; storing
the inter-coded frames in a first file; and storing the intra-coded frames, whether encrypted under the first
encryption algorithm or unencrypted, in a second file. For a multiple encryption embodiment consistent
with the present invention, the method further involves duplicating the intra-coded **frames**; encrypting
duplicates of the selected **frames** under a **second encryption algorithm** to produce **second encrypted
frames**; storing the intra-coded **frames**, whether encrypted under the **second encryption algorithm** or
unencrypted, in a third file. This abstract is not to be considered limiting, since other embodiments may
deviate from the features described in this abstract.

Descriptors: Frames; Encryption; Algorithms; Storage; Inventions; Reproduction; Constraining;
Dynamics; Video on demand
Subj Catg: 71, General and Nonclassified; 61, Design Principles; 99, General

16/5/11 (Item 8 from file: 23)
DIALOG(R)File 23: CSA Technology Research Database

0008891554   IP Accession No: 200804-71-466978; 200804-61-494336; 2008451369; A08-99-481143
Method and apparatus for providing conditional access in connection-oriented, interactive networks with a multiplicity of service providers

Wasilewski, Anthony John; Woodhead, Douglas F; Logston, Gary Lee
, USA
Publisher Url: http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u =/netaht
ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=58 70474.PN.&OS=pn/5870474&
RS=PN/5870474

Document Type: Patent
Record Type: Abstract
Language: English
File Segment: Metadex; Mechanical & Transportation Engineering Abstracts; ANTE: Abstracts in New
Technologies and Engineering; Aerospace & High Technology

Abstract:
A control system provides secure transmission of programs, including at least one of video, audio, and data,
between a service provider and a customer's set top unit over a digital network. Program bearing data
packets are recieved in a first network protocol over a first data link and removed from the first network
protocol. Packets representing a particular program requested by a customer having a set top unit are
selected. Conditional access is provided to the selected program. In particular, program bearing packets are
encrypted according to a first encryption algorithm using a first key, which is then encrypted according to a
second encryption algorithm using a second key. The first keys are transported in **packets** to the
customer's set top units along with the program packets. A public key cryptographic technique encrypts the
second key such that the public key used in the encryption corresponds to the private key of the customer's
set top unit. After the conditional access layers have been added, the packets are encapsulated and output in
a second network protocol destined for the set top unit.

Descriptors: Networks; Conditional access; Encryption; Algorithms; Bearing; Encapsulation;
Cryptography; Data links; Keys; Control systems; Customer satisfaction; Genetic algorithms
Subj Catg: 71, General and Nonclassified; 61, Design Principles; 99, General